

JC17 Rec'd PCT/PTO 24 MAR 2005

[amended 06/04]

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CLAIMS

1. An apparatus for collecting water from the atmosphere, said apparatus including:

a body defining an enclosed space;

5 a plurality of downwardly angled condenser members within said enclosed space upon which moisture can condense, said enclosed space communicating with said atmosphere;

10 a circulation means for circulating cold air exterior and/or interior to said apparatus, said circulation means including an air-conditioning unit; and

a collection means for collecting thus condensed said moisture.

2. An apparatus as defined in Claim 1 wherein said cold air is provided through a closed circuit system.

- 15 3. An apparatus as defined in Claim 2 wherein said closed circuit system includes air ducts.

4. An apparatus as defined in Claim 3 wherein said air ducts include a heat exchange means.

5. An apparatus as defined in Claim 4 wherein said heat exchange means includes fins.

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6. An apparatus as defined in any one of Claims 1 to 5 wherein said circulation means is powered directly or indirectly by solar cells.
7. An apparatus as defined in any one of Claims 1 to 5 wherein said circulation means is powered by mains power.
- 5 8. An apparatus as defined in Claim 1 which further includes a flow means for increasing flow of air from said atmosphere through said enclosed space, said flow means including a pressure means to alter pressure within said apparatus to increase said flow of air.
- 10 9. An apparatus as defined in Claim 8 wherein said pressure means includes a venturi.
10. An apparatus as defined in Claim 8 or Claim 9 wherein said body is of a substantially inclined configuration when said apparatus is in use.
11. An apparatus as defined in any one of Claims 1 to 10 wherein said condenser members are arranged in rows.
- 15 12. An apparatus as defined in Claim 11 wherein said condenser members in one of said rows are arranged in an opposite inclination to the condenser members in another adjacent row of said rows, the space between said one row and said adjacent row defining a passage through which said thus condensed said moisture can flow.
- 20 13. An apparatus as defined in Claim 11 or Claim 12 wherein said rows are concentric.

14. An apparatus for collecting water from the atmosphere, said apparatus including

a body defining an enclosed space;

a plurality of downwardly angled condenser members within said enclosed space upon which moisture can condense, said enclosed space communicating with said atmosphere; and

collection means for collecting thus condensed said moisture;

characterised in that each of said condenser members is of a conical configuration.

15. An apparatus for collecting water from the atmosphere, said apparatus including:

a body defining an enclosed space;

a plurality of downwardly angled condenser members within said enclosed space upon which moisture can condense, said enclosed space communicating with said atmosphere; and

collection means for collecting thus condensed said moisture;

characterised in that each of said condenser members is of a frusto-conical configuration.

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16. An apparatus for collecting water from the atmosphere, said apparatus including:

a body defining an enclosed space;

a plurality of downwardly angled condenser members within said enclosed space upon which moisture can condense, said enclosed space communicating with said atmosphere; and

collection means for collecting thus condensed said moisture;

characterised in that each of said condenser members is of circular cross-section.

17. An apparatus as defined in any one of Claims 14 to 16 wherein said condenser members are supported at spaced apart positions along respective central support members.

18. An apparatus as defined in Claim 17 wherein each of said support members is hollow to define a flow passage through which said condensed moisture can pass for subsequent collection.

19. An apparatus as defined in any one of Claims 14 to 18 wherein each of said condenser members are downwardly angled 45 degrees.

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(amended 08/04)

20. An apparatus for collecting water from the atmosphere, said apparatus including:

an elongated chamber defining an enclosed space, said elongated chamber being inclined to the horizontal when said apparatus is in use;

cooling means to cool said chamber;

a plurality of condenser members upon which moisture can condense within said enclosed space;

an air inlet and an air outlet communicating said chamber with said atmosphere; and

collection means at one end of said chamber for collecting condensed said moisture.

21. An apparatus as defined in Claim 20 wherein cooling means are also provided to cool said condenser members.

22. An apparatus as defined in Claim 20 or Claim 21 wherein each said cooling means include cold air tubes within said chamber.

23. An apparatus as defined in Claim 22 wherein said cold air tubes are located adjacent to said condenser members.

24. An apparatus as defined in Claim 22 or Claim 23 wherein cold air is supplied to said cold air tubes by an air-conditioning unit.

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25. An apparatus as defined in Claim 24 wherein said cold air is provided through a closed circuit system.
26. An apparatus as defined in any one of Claims 1 to 25 wherein said condenser members are coated with zircon, zeolite or a similar hydrophilic material.

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